

16152 U.S. PTO  
031804

Patent  
Attorney Docket No. 032566-057

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
UTILITY PATENT  
APPLICATION TRANSMITTAL LETTER

22782 U.S. PTO  
10/803639  
031804

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Customer Number 2 1 8 3 9

Sir:

Enclosed for filing is the utility patent application entitled:

METHODS AND APPARATUS FOR PATTERNED DEPOSITION OF  
NANOSTRUCTURE-CONTAINING MATERIALS BY SELF-ASSEMBLY  
AND RELATED ARTICLES

by the following named inventor(s):

Otto Z. ZHOU, Soojin OH, Jian ZHANG, Yuan CHENG, and Hideo SHIMODA,

☒ Applicant(s) suggests Figure 4 for inclusion on the front page of the patent application publication and patent.

☒ Applicant(s) requests that the published application include the following assignment information:  
The University of North Carolina at Chapel Hill

☒ Small entity status is claimed.

Also enclosed are:

DRAWINGS: 9 sheets of formal drawings        sheets of informal drawings

DECLARATION: ☐ will follow ☐ executed, is enclosed ☒ unexecuted, is enclosed

ASSIGNMENT: ☐ is enclosed ☒ will follow

**CLAIM FOR  
PRIORITY  
UNDER  
35 U.S.C.  
§ 119 and/or  
365:**

☐ is made in the declaration ☐ is hereby made as follows

Country	Appl. No.	Filing Date MM-DD-YYYY

☐ certified copy(ies) enclosed ☐ certified copy(ies) will follow

**OTHER PAPERS:** ☐ A General Authorization for Petitions for Extensions of Time and Payment of Fees.

☐ An Information Disclosure Statement.

☐ An Application Data Sheet (ADS).

☐ \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☒ The filing fee has been calculated as follows ☐ and in accordance with the enclosed preliminary amendment:

CLAIMS					
	No. of Claims		Extra Claims	Rate	Fee
Basic Application Fee (1001)					\$ 770.00
Total Claims	28	MINUS 20 =	8	x \$18.00 (1202) =	\$ 144.00
Independent Claims	4	MINUS 3 =	1	x \$86.00 (1201) =	\$ 86.00
If multiple dependent claims are presented, add \$290.00 (1203)					\$ 0.00
Total Application Fee					\$ 1,000.00
<input checked="" type="checkbox"/> Small Entity Status claimed - subtract 50% of Total Application Fee					\$ 500.00
Add Assignment Recording Fee of \$40.00 (8021) if Assignment document is enclosed.					\$ 0.00
<b>TOTAL APPLICATION FEE DUE</b>					<b>\$ 500.00</b>

☐ This application is being filed without a filing fee. Issuance of a Notice to File Missing Parts of Application is respectfully requested.

- ☒ Charge \$ 500.00 to Deposit Account No. 02-4800 for the fee due.  
☐ A check in the amount of \_\_\_\_\_ is enclosed for the fee due.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☒ The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Please address all correspondence concerning this application to:

Burns, Doane, Swecker & Mathis, L.L.P.  
Customer Number **2 1 8 3 9**  
P.O. Box 1404  
Alexandria, Virginia 22313-1404

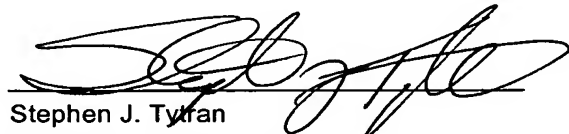
Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(919) 941-9240


Filed: March 18, 2004

By

  
Stephen J. Tylan  
Registration No. 45,846

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

"Express Mail" Mailing Label No.: EV 171 996 516 US Date of Deposit: March 18, 2004

  
Jennie Snead  
Typed Name: